Madagascar locust update for March, 2011 with a forecast for the next dekad

Meteorological conditions

During March, rainfall was gradually diminished in most of the invasion, gregarization and multiplication zones and only some localities in the central part of the multiplication areas received moderate rain. However, conditions remained fairly favorable in the transient multiplication zone in the northwest. Elsewhere, progressive moisture deficit continued and vegetation was drying up towards the end of the month.

Locust situation

Successive waves of 3rd generation hatchings resulted in hoppers and bands in the transient multiplication zone. Dense populations of adult locusts were observed on 1,000 ha in the lowland of Befandriana-Sud and low valley of Manombo in the northwest zone. In the central region, on Belomotra plateau and Andranovory, dense populations of mostly mature yellow adults were reported during this month. Large numbers of 1st and 2nd instar hoppers and bands of transient semi-gregarious populations were also reported in these areas.

Mature adults mixed with 2nd and 3rd instar hoppers at 10-30 insects/ m² were reported on the Mahafaly plateau and in the northern part of the Ilempo basin and 1st - 4th instar hoppers/bands, mostly 300-500 m² in size and 500 meters to half a mile apart were also reported between Linta River and Beomy village. 2nd–4th instars bands were sighted in bushes in Itomboina over 400 m² within 500 meters, extending to Andremba in the Centre of the Mahafaly plateau and along a narrow line of 5 km in Iiovo, north of Itomboina in Ankazomanga on *Heteropogon contortus* in savannah in the foot hills of Mahafaly, between Sainta and Ejeda. The locusts covered some 25,000 ha in low savannah, bushy to wooded areas.

A dense swarm, probably coming from Mahafaly passed over Bekily-Fotadrevo and headed north following Ianapera River and then crossing Benenitra and Ianakafy before moving to Isalo towards the end of the month. The swarm may have laid eggs while passing through. Medium and high density transient and gregarious hoppers and bands were also noticed between Gogogogo and Ejeda, Fotadrevo, north Bekitro, Soamanonga, Ambohangy and Androy.

Small pockets of adult swarms of **Red (Nomadic) locust** were reported in some localities in the Malagasy locust outbreak areas in Befandriana-Sud, on the Bank of Fiherenana and in Fotadrevo around Soba.

Impacts of current locust invasions on crops and pasture

Crop or pasture damage from locust attacks has not been reported during this period as most locusts are in their natural habitat, however, as populations continue increasing and swarms start moving between outbreak and invasion areas, the threats to crops and pasture remain eminent.

Intervention actions

Survey and control operations were intensified and aerial and ground control treated/protected more than 60,000 ha in March using 47,578 l of Chlorpyrifos 240 ULV and 2,500 l of Nomolt 50 UL. An FAO helicopter conducted survey and control operations from 24-27 March in south Befandriana, Belomotra and Mahafaly before departing for Antananarivo for a scheduled maintenance (the helicopters have logged a cumulative total of 582 since the current campaign began on 15th October, 2010).

Ground operations began on February 22, 2011 in Sakaraha and spread to Ejeda, Ampanihy and Ambovombe. From March 29 to 31, ground surveys were carried out in Betioky Tsitohaina, Andriamaroahina and followed with control operations in Sakaraha, Befandriana-sud, Ejeda and Ambovombe. So far, 14,076 ha have been treated by ground means with Chlorpyrifos 240 ULV and 12,500 ha have been protected with 2,500 l of Nomolt 50 UL (the total number of hectares treated as of March, 2011 is 112,416 - 98,340 ha by air and 14,076 ha by ground means).

Note: The UN/FAO and the Malagasy Center for Locust Control are spearheading the current control campaign and USAID through its Office of Foreign Disaster Assistance responded favorably to the appeal issued in support of the locust emergency campaign operations. Other donors pledged and/or made contributions and it is anticipated that this will likely continue. End note.

Pesticide inventory and empty container management

FAO-CNA pesticide inventory stands at 22,753 l of Chlorpyifos 240 ULV, 14,500 l of Nomolt 50 UL and 900 kg of GreenMuscle (biopesticide) as of the end of March.

As part of an effort to ensure safety of humans and protect the environment, four hundred and twenty nine (429) two hundred-liter empty pesticide containers have been recovered and stored under the supervision of the zonal CNA agents and the central pesticide store manager in Tuléar. Environmental monitoring is expected to commence in Belomotra and Mahafaly during the first dekad of April.

Forecast

The presence of large numbers of hoppers and bands over the past dekads is an indication of favorable eco-meteorological conditions and parental populations. Although rainfall is diminishing in most of the primary outbreak and gregarization/multiplication zones, adult populations could form dense groups and swarms and move to areas where favorable conditions exit and begin laying eggs and likely result in a wave of new invasions (Source: Amadou KAMARA, FAO-CNA, 4/2011).

Recommendations

Survey and control interventions should continue to mitigate locust populations and further development. ***Prepositioning supplies and materials in time for survey and control operations to continue will be necessary and can prevent major developments. Vigilance and timely interventions remain essential to avoid any major impacts to crops and pasture.***

OFDA/TAG will continue monitoring the situation and issue updates and advice accordingly.